

4450

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
....., Director	
<div></div>	
State: Washington.....	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	} Sheet No. <sup>E</sup> 4450
LOCALITY	
West Coast	
Cape Johnson	
<div></div>	
<div></div>	
1923	
CHIEF OF PARTY	
R. D. Horne	

OUTER HARBOR OFFICE

C. & G. SURVEY  
L. & A.  
OCT 31 1929  
Acc. No.

DESCRIPTIVE REPORT TO ACCOMPANY SHEET "E"

CAPE JOHNSON TO OZETTE

Party of R.D.Horne, Instructions dated May 16, 1929

Scale 1:20,000

DESCRIPTIVE REPORT TO ACCOMPANY SHEET "E"

CAPE JOHNSON TO OZETTE

Party of R.D.Horne, Instructions dated May 16, 1929, scale 1:20000

GENERAL DESCRIPTION:

The bluff rises sharply from the high water line, and is heavily wooded except for one or two places where slides have bared the slope.

A small rocky beach along the base of the bluff permits passage on foot at nearly all stages of the tide, altho at a few places the bluff rises too steeply, and the rocks at the base are not numerous enough to permit passage at high water.

The area inside of the outer reef-like rocks is foul, and at low tide numerous small rocks are visible.

SURVEY METHODS:

A traverse was started from a three point fix on the rocky ledge below signal John, and checked in at signal Walk with a five meter error. Cuts were taken to off-lying rocks, and all features were located to within several hundred meters of Walk.

Respectfully submitted,

Gilbert R. Fish  
Gilbert R. Fish, Topographer  
Aid, C. & G. Survey.

Respectfully forwarded,

Roland D. Horne

Roland D. Horne,  
Chief of Party.

## SHEET "E"

## PLANE-TABLE POSITIONS

Object & Description		Lat.	D.M.	Long.	D.P.	Height	Remarks
Bot	Face of point	47-59	1164	124-40	710	10'	
Ann	Rock	47-59	926	124-40	1137	52	Top
Mil	Boulder on beach	47-59	803	124-40	534	8	
Sma	Rock, small	47-59	460	124-40	436	6	
Rol	Rock	47-58	1738	124-40	368	59	Top
Wif	Rock, green	47-58	1416	124-40	328	62	Top
Cop	Face of bluff at small rky. point	47-58	853	124-40	523	12	
Gee	Face of bluff at corner	47-58	171	124-40	683	15	
Hump	Rock	47-58	208	124-40	1183	127	Highest pt.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4450

## TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter E

REGISTER NO. 4450

State WashingtonGeneral locality Olympic Peninsula, West Coast.Locality Cape Johnson to Ozette Id.Scale 1:20,000 Date of survey October, 1929Vessel                     Chief of Party Roland D. HorneSurveyed by Gilbert R. FishInked by " " "Heights in feet above HW to ground ~~to tops of trees~~~~Contour~~ Approximate contour Form line interval 20 feetInstructions dated May 16, 1929.Remarks: Incomplete (2 miles shoreline finished)

4450

Additional Work

Original

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R.S. Patton, Director

U. S. COAST & GEODETIC SURVEY  
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APR 27 1931

State: Washington.....

Acc. No. ....

DESCRIPTIVE REPORT

Topographic  
Hydrographic

Sheet No. 4450

LOCALITY

Pacific Coast

~~W. Coast of Washington~~

Cape Johnson to Cape Alava

19230

CHIEF OF PARTY

K.T. Adams

GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT  
to accompany  
Topographic Sheet No. 4450  
Scale 1:20,000

Cape Johnson to Cape Alava, Washington.

Date of Instructions: April 16, 1930.  
Date of Survey: August 21 - October 11, 1930.  
Chief of Party: K. T. Adams, H & G Engineer.  
Topographer: G. R. Fish-1929; A. N. Stewart-1930.

LIMITS: This sheet includes the shore line and off-lying rocks from Cape Johnson, Latitude  $47^{\circ}$ -  $58'$ , to Bodeltch Islets or Cape Alava, Latitude  $48^{\circ}$ -  $11'$ .

The topography from the southern limit to station Walk was done in 1929 by G. R. Fish, and the remainder in 1930 by A.N. Stewart.

This report covers the work done in 1930.

CONTROL: The control consists of triangulation stations established by R. D. Horne in 1929 and by K. T. Adams in 1930. These are at intervals of one to four miles along the coast. Two first order stations established in 1913 on Carroll and Ozette Islands were used. During the season of 1930 several prominent rocks were located by triangulation, and a marked station was established on Umatilla Reef.

METHODS: The survey was made from camp at intervals along the coast, the party working in each direction from camp as far as practicable.

The entire coast line was surveyed by traversing from one triangulation station to the next, the hydrographic signals being built and located at the same time.

The traverse errors were as follows:  
From Walk to Hid, 6 meters, which was adjusted proportionally.  
From Hid to Face, 2 meters, not adjusted.

From Face to Sand, 40 meters. This was adjusted by cutting in, from three places, the signals and rocks located at intervals of a half mile along the coast while running the traverse. These cuts were obtained from station Sand, from a rock a half mile south of Sand, and from the ship. On the rock a three point fix was obtained on triangulation stations. Here a sextant and three arm steel protractor, both previously adjusted, were used. At the time the cuts were obtained from the ship she was lying dead in the water about three quarters of a mile north of Face and one and one half miles off shore. Three officers on the ship were reading angles simultaneously, two getting a three point fix on triangulation stations and a third the cut. Cuts obtained from the three places intersected very satisfactorily, and the shore line was adjusted to the new positions of the signals and rocks close inshore.

From Sand to Indian, No error.

From Indian to Alava, No error.

Plane table set-ups were made on Jagged and Carroll Islands. The station on Umatilla reef was occupied and numerous cuts taken to aid in the location of the Bodeltch Islets.

The eastern shore of Ozette Island was located by establishing a number of whitewashes and cutting them in in connection with the traverse along the coast. On the north end of the island a position for a set-up was obtained by intersection and resection. From this point a traverse was run around the west side of the island and connected in to one of the points located from shore. The closing error here was two meters, left unadjusted.

The Bodelten Islets were located by numerous cuts and by rowing around the islets to sketch in the shore line.

STATISTICS: Statute miles of traverse: 15.2  
Statute miles of shore line: 20.1 (3.1 additional  
in 1929)  
Working days: 13  
Men in party: 4

GENERAL DESCRIPTION: In general the coast is rocky and irregular, but with no large indentations. The high water line and bluff line were largely coincident, and this was a factor in



slowing up the progress of the party. Nearly every day an hour or two was lost during the high tide and more time than that if there happened to be a rock point to get around. Marked set-ups were several times destroyed during high tide because of rocks rolling in the surf.

The low water line in most places lies at some distance off-shore. The area between high and low water lines is in general rocky. Sand beaches are found for a distance of about a mile on both sides of the point on which Hid is located, in the indentation between signals Stew and Big, southeast of Sand for one and one-third miles, north of Sand for a short distance, and around Cape Alava. Along the rocky stretches it was necessary to run the traverse outside the high water line. In such places it was often very difficult to get proper cuts to off-lying low rocks and breakers on account of a heavy surf.

There are numerous rocks of varying height and rocks awash all along the coast out to a distance of one to two miles from the high water line. At the outer limits of these rocks are Jagged Island, Carroll Island, White Rock, Ozette Island, Bodelteh Islets, and Umatilla Reef. Of these, Carroll Island, Ozette Island, and the two highest of the Bodelteh Islets are wooded.

All the hills on shore visible from sea are heavily wooded and there is an almost impenetrable underbrush. At times it was attempted to go through this brush in getting around a point at high tide. It was found next to impossible, even for a man carrying no load.

On that part of the sheet done by G. R. Fish no wooded sections are shown. However, it is known that it is wooded similarly to that north of it.

The form line interval used on shore is twenty feet. This is the interval with which the sheet was started in 1929. On the larger islands an interval of fifty feet has been used because of lack of space for twenty foot intervals.

A small amount of fine gold is found all along the coast, but not in paying quantities.

REMARKS: Close in to the eastern shore of Ozette Island there is a small anchorage used during the fishing season by small boats. There is room enough for about four boats. The channel leads in from the southern end of the island and is very narrow. The fishermen have planted no buoys as markers, but go through a lane, only a few feet wide, marked by thick kelp on both sides.

The wreck of the Austria shown on Chart No. 6265, near Wahyah Islet, has broken up and washed ashore. There are only a few remaining pieces. These are lying flat and half buried in sand and are hardly noticeable even to one walking along the shore.

The Ozette Indian village on Cape Alava has been practically abandoned and most of the shacks are falling apart. There are only two in use, and those, only part of the time. A good trail leads from the village to Lake Ozette where there are a number of homesteaders. There are small boats in the lake and by crossing one can make connections with the bus lines on the highway. It was reported that during the summer months mail was taken twice a week from the village to the lake, but this was unconfirmed.

The hydrographer found no indication of the breaker three-tenths of a mile North-White rock. At low water a total of six cuts with a very good intersection were obtained. This breaker does not always show even at low water.

Mention might be made of the sand beach south of station Sand, on which airplanes have landed a few times on pleasure trips. This is possible only when the tide is comparatively low. At such times the beach is wide, almost flat, and hard.

Carroll Island, is sometimes locally called Keyhole Island, because of an arch through one corner. This is not visible from seaward.

Respectfully submitted,

*A. Newton Stewart*  
A. Newton Stewart,  
Jr. H & G Engineer.

ANS/s

Forwarded, approved:

*K. T. Adams*

K. T. Adams,  
Chief of Party,  
Steamer GUIDE.

Plane Table Positions  
Sheet No.4450.

Object	Latitude °	DM's	Longitude °	DP's	
Bald Id.	47-59	1597(256)	124-41	935(309)	Outer peak, 299' bare.
Rock, top of	47-59	917(936)	124-43	442(802)	4', near Jagged Id. Topo Sig. TOP.
Carroll Id.	47-59	610(1243)	124-43	491(753)	225', highest part, wooded.
Rock, top of	48-00	349(1504)	124-43	407(837)	4', S. of Carroll Id. Topo Sig. CAN
Rock, top of	48-00	739(1114)	124-43	621(623)	134', N.W. of Carroll Id. Topo signal PAN.
Rock, top of	47-59	1379(474)	124-41	576(668)	183', SE of Bald Id., bare
Rock, " "	48-00	17(1836)	124-41	621(623)	90' NE of Bald Island.
Rock, " "	48-00	258(1595)	124-40	1070(174)	83" Wooded, near WALK
Rock, " "	48-00	838(1015)	124-40	868(378)	99', $\frac{1}{2}$ Mi. NE of WALK, Topo. Sig. DOG
Dump, Mine	48-00	1664(189)	124-40	798(446)	Abandoned, Topo. Sig. DUMP
Shack	48-00	1836(17)	124-40	825(419)	W. gable of Northern of two shacks Topo. Signal GAB
Rock, top of	48-00	1250(603)	124-42	62(1181)	1 Mi. NE of Carroll Island.
Rock, " "	48-00	1319(534)	124-41	832(411)	4'
Rock, " "	48-02	1308(545)	124-41	102(1141)	70' Topo. Signal DE
Rock, " "	48-03	244(1609)	124-41	412(831)	46' Topo. Signal ELF
Rock, " "	48-03	1635(218)	124-42	46(1196)	4', $\frac{1}{2}$ Mi. NW of Face.
Rock, " "	48-04	140(1213)	124-41	821(421)	21'
Rock, " "	48-04	343(1510)	124-41	984(258)	40'
Rock, awash	48-04	1621(232)	124-42	721(521)	Bares 7' Low water, Topo. Sig. WEST
Rock, " "	48-05	760(1093)	124-41	704(538)	15', S end of indentation.
Shack	48-05	1073(780)	124-41	268(973)	N. Gable
Rock, top of	48-06	747(1106)	124-41	720(521)	10'
Rock, " "	48-06	521(1332)	124-41	721(520)	18'
Shack	48-07	440(1413)	124-41	1027(214)	Center of
Rock, top of	48-07	1100(753)	124-42	834(407)	on which SAND is located.
Rock, " "	48-07	168(1685)	124-42	997(244)	$\frac{1}{2}$ Mi S. of SAND, high part of S. end approximately 25'.
Rock, " "	48-06	1060(793)	124-43	1188(53)	1'
Rock, " "	48-07	814(1039)	124-43	1030(211)	Reef $\frac{2}{3}$ Mi. S of White Rock, S of two highest, 5'.
Rock, " "	48-07	928(925)	124-43	966(275)	Reef $\frac{2}{3}$ Mi. S. of White Rock, N of two highest, 7'
<del>of two highest</del>					
Rock, " "	48-08	158(1695) <del>43(1810)</del>	124-43 <del>124-42</del>	103(1038) <del>654(587)</del>	18'
Rock, " "	48-08	43(1810)	124-42	654(587)	32'
Rock, " "	48-08	493(1360)	124-42	933(307)	68'
Rock, " "	48-08	447(1406)	124-42	1050(190)	26'
Rock, " "	48-08	506(1347)	124-42	1000(242)	20'
Rock, " "	48-08	816(1037)	124-43	215(1025)	52'
Rock, " "	48-08	1021(832)	124-43	1225(15)	37'
Rock, " "	48-08	1106(747)	124-43	39(1201)	48'
Rock, " "	48-09	150(1703)	124-43	779(461)	63'
Clump of trees	48-10	656(1197)	124-44	854(386)	Center of SE Corner Ozette Id.

Object	Latitude		Longitude		DP's	
	°	DM's	°	'		
Rock, top of	48-09	1008(845)	124-45	290(950)		Topo. Sig. TIM.
Rock, " "	48-10	1065(768)	124-45	959(281)		141', Bodelteh Islets.
Rock, " "	48-10	1374(479)	124-46	298(942)		Center, 4', off Bodelteh Islets, Topo. Sig. HI
Rock, " "	48-10	1725(128)	124-44	575(665)		3', Topo. Sig. <u>FLAT</u> , NE Bodelteh Islets.
Rock, " "	48-09	579(1274)	124-45	462(778)		NE of two Rks. W of Ozette Island.
Rock, " "	49-09	497(1356)	124-45	520(720)		SW of two Rks. W of Ozette Island.
Rock, " "	48-01	281(1572)	124-40	1078(165)		68', Topo. Sig. <u>RAT</u> .
Rock, " "	48-01	411(1442)	124-40	1093(150)		36', Topo. Sig. <u>COW</u> .

## Topographic Sheet No. 4450.

## List of Signals

Signal	Latitude	DM.	Longitude	DP	Remarks
Abe	48-01	791(1062)	124-40	1070(173)	?
Art	48-04	354(1499)	124-41	992(250)	W.W.
Be	48-01	1552(301)	124-40	1105(138)	Cloth banner
Big	48-06	111(1742)	124-41	538(703)	W.W.
Blu	48-08	1745(108)	124-43	210(1032)	W. W.
Bode	48-10	1091.6(7596)	124-45	8256(4142)	Tall tree
Cal	48-00	987(866)	124-40	769(475)	Bodelteh Islets.
Can	48-00	349(1504)	124-43	407(837)	W.W.
Cat	48-00	692(1161)	124-43	419(825)	Top of Rock 4'
Cow	48-01	411(1442)	124-40	1093(150)	S. of Carroll Id.
De	48-02	1308(545)	124-41	102(1141)	?
Dog	48-00	837(1016)	124-40	868(376)	Top of Rock 36'
Dump	48-00	1664(189)	124-40	798(445)	Top of Rock 70'
Ear	47-59	1575(278)	124-41	1008(236)	Top of Rock 99'
Elf	48-03	244(1609)	124-41	412(831)	Mine dump, abandoned
Fin	47-59	863(990)	124-43	814(430)	W.W.
Flat	48-10	1725(128)	124-44	575(665)	Top of Rk. 46'.
Gab	48-00	1836(17)	124-40	825(419)	W.W.
Ge	47-59	1642(211)	124-41	716(528)	Top of Rock 3'
Gul	48-08	1249(604)	124-41	882(359)	W. gable, N. of two shacks.
Hi	48-10	1374(479)	124-46	298(942)	W.W.
Hit	48-04	1254(599)	124-41	807(435)	Rock awash.
Pan	48-00	739(1114)	124-43	621(623)	Top of rock 4'
Rat	48-01	281(1572)	124-40	1078(165)	Cloth Banner.
See	48-02	884(969)	124-40	1196(47)	134' Rk. N.W. Carroll Id.
Stew	48-05	279(1574)	124-41	823(419)	Top of rock 68'
Tim	48-09	1008(845)	124-45	290(950)	W.W.
Toe	47-59	1129(724)	124-43	684(560)	Cloth Banner
Top	47-59	917(936)	124-43	442(802)	Top of Rk. near Ozette Island.
Wash	48-06	1644(209)	124-41	713(528)	W.W.
West	48-04	1621(232)	124-42	721(521)	Top of 4' Rk. near Jagged Island.
					Stump on beach.
					Rock awash, bares 7' Low water.

Additional Work

Form 537a  
Ed. Nov., 1929

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4450

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ....

REGISTER NO. 4450

State WASHINGTON

General locality ~~N. W. Coast~~ Pacific Coast

Locality Cape Johnson to Cape Alava

Scale 1:20,000 Date of survey August 21, - Oct. 11 1930

Vessel GUIDE

Chief of Party K. T. Adams

Surveyed by A. N. Stewart

Inked by A. N. Stewart

Heights in feet above H. W. to ground -to-tops-of-trees-

Contour, Approximate ~~contour~~, Form line interval 20 feet on mainland

" " " " 50 " " Islands

Instructions dated April 16, 1930, 19-

Remarks: Sheet started by R. D. Horne in 1929.